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Meniscal Transplant Physical Therapy Protocol

Weeks 0-2

Primary goals: Eliminate swelling; ROM – full extension; NWB; Regain quad control

- NWB 6 weeks
- Brace locked in extension for ambulation with crutches with return of active straight leg raise
- Brace locked in extension for sleep (can remove brace to sleep after first post-op visit, 7-10 days)
- ROM limited to 0-90, towel rolls
- Patella mobilization
- Straight leg raise, heel slides, quad sets
- No isolated hamstrings activation

Weeks 2-6

Primary goals: Increase ROM; Increase total leg strength

- Continue brace, crutches, NWB
- ROM as tolerated (minimum 0-110), focus on terminal extension
- Emphasize patellar mobilization, quadriceps tendon and patellar tendon mobilization
- Straight leg raise, terminal extension, hip abduction, ankle pumps
- Quad sets
- Abdominal isometrics
- No isolated hamstrings activation

Weeks 7-9

Primary goals: Achieve full WB, normalize gait, maintain no joint effusion

- Progressive balance training consistent with WB status
- Calf raises
- Leg press
- Double leg squats once full WB with ambulation
- Core and upper-body strengthening as indicated and appropriate
- Stationary bike without resistance

Weeks 10-15

Primary goals: Increase strength, balance, gait; 90-sec hold in single-leg squat position at 45 deg knee flexion

- Double leg squats
- Static Lunges
- Dynamic Lunges
- Stationary bike with resistance

Weeks 16-21

Primary goals: Quadriceps index >80%, Anterior reach on Y Balance Test, <8-cm difference compared to uninvolved side

- Single-leg squats
- Single-leg deadlifts
- Step-ups/step-downs
- Multidirectional lunges
- Stationary bike with resistance

Weeks 22+

Primary goals: Muscular power training, Running and Return to sport

- Maximize muscular strengthening
- Proper jumping and landing mechanics
- Running progression
- After completed running progression, agility and cutting exercises with in-corporation of sport specific